

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

ENTROPIC COMMUNICATIONS, LLC,

Plaintiff,

v.

CHARTER COMMUNICATIONS, INC.,

Defendants.

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CIVIL ACTION NO. 2:22-CV-00125-JRG-RSP

REPORT AND RECOMENDATION

Before the Court is Defendant Charter Communications, Inc.’s Motion For Summary Judgment of Invalidity Of The Asserted Claims Of The ’362 Patent (Dkt. No. 173. After consideration, the Court recommends the motion be **DENIED**.

I. BACKGROUND

Entropic Communications, LLC filed its initial complaint on April 27, 2022 asserting Charter infringes U.S. Patent Nos. 8,223,775 (the “’775 Patent”), 8,284,690 (the “’690 Patent”), 8,792,008 (the “’008 Patent”), 9,210,362 (the “’362 Patent”), 9,825,826 (the “’826 Patent”), and 10,135,682 (the “’682 Patent”) (collectively “the Asserted Patents”). (Dkt. No. 1 at ¶1.)

The Court previously construed “downconverting . . . a plurality of frequencies” and the Order of Steps in the ’362 Patent’s Claim 11. (*See* Dkt. No. 123 at 48.) Relevantly, the Court construed “downconverting . . . a plurality of frequencies” to have its plain meaning and found no order was required as to the “downconverting. . .” step and the “digitizing . . .” step. (*Id.* at 52.)

II. APPLICABLE LAW

Summary judgment should be granted “if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(a). Any evidence must be viewed in the light most favorable to the nonmovant. *See Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 255 (1986) (citing *Adickes v. S.H. Kress & Co.*, 398 U.S. 144, 158–59 (1970)). Summary judgment is proper when there is no genuine dispute of material fact. *Celotex v. Catrett*, 477 U.S. 317, 322 (1986). “By its very terms, this standard provides that the mere existence of some alleged factual dispute between the parties will not defeat an otherwise properly supported motion for summary judgment; the requirement is that there be no genuine [dispute] of material fact.” *Anderson*, 477 U.S. at 247–48. The substantive law identifies the material facts, and disputes over facts that are irrelevant or unnecessary will not defeat a motion for summary judgment. *Id.* at 248. A dispute about a material fact is “genuine” when the evidence is “such that a reasonable jury could return a verdict for the nonmoving party.” *Id.*

The moving party must identify the basis for granting summary judgment and evidence demonstrating the absence of a genuine dispute of material fact. *Celotex*, 477 U.S. at 323. “If the moving party does not have the ultimate burden of persuasion at trial, the party ‘must either produce evidence negating an essential element of the nonmoving party’s claim or defense or show that the nonmoving party does not have enough evidence of an essential element to carry its ultimate burden of persuasion at trial.’” *Intellectual Ventures I LLC v. T Mobile USA, Inc.*, No. 2:17-CV-00577-JRG, 2018 WL 5809267, at *1 (E.D. Tex. Nov. 6, 2018) (quoting *Nissan Fire & Marine Ins. Co., Ltd. v. Fritz Cos., Inc.*, 210 F.3d 1099, 1102 (9th Cir. 2000)).

A. 35 U.S.C. §112

35 U.S.C. §112 “contains a written description requirement separate from enablement.” *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010).

The enablement requirement is that the “patent's specification must describe the invention and ‘the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains ... to make and use the same.’ 35 U.S.C. § 112(a) (2012). Claims are not enabled when, at the effective filing date of the patent, one of ordinary skill in the art could not practice their full scope without undue experimentation.” *Wyeth & Cordis Corp. v. Abbott Lab'ys*, 720 F.3d 1380, 1384 (Fed. Cir. 2013). “Undue experimentation” is determined by considering: “(1) the quantity of experimentation necessary, (2) the amount of direction or guidance presented, (3) the presence or absence of working examples, (4) the nature of the invention, (5) the state of the prior art, (6) the relative skill of those in the art, (7) the predictability or unpredictability of the art, and (8) the breadth of the claims” (the “Wands Factors.”) *In re Wands*, 858 F.2d 731, 737, 8 U.S.P.Q.2d 1400 (Fed. Cir. 1988).

A patent’s written description must “clearly allow persons of ordinary skill in the art to recognize that [the inventor] invented what is claimed.” *In re Gosteli*, 872 F.2d 1008, 1012 (Fed. Cir. 1989) (citation omitted). “The purpose of the written description requirement ‘is to ensure that the scope of the right to exclude, as set forth in the claims, does not overreach the scope of the inventor's contribution to the field of art as described in the patent specification.’” *In re Katz Interactive Call Processing Patent Litigation*, 639 F.3d 1303, 1319 (Fed. Cir. 2011) (quoting *Reiffin v. Microsoft Corp.*, 214 F.3d 1342, 1345 (Fed. Cir. 2000)). “While the meaning of terms, phrases, or diagrams in a disclosure is to be explained or interpreted from the vantage point of one

skilled in the art, all the limitations must appear in the specification.” *Lockwood v. Am. Airlines, Inc.*, 107 F.3d 1565, 1572 (Fed. Cir. 1997).

To satisfy the written description requirement, the disclosure must “convey[] to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.” *Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc). “[T]he hallmark of written description is disclosure. . . . [T]he test requires an objective inquiry into the four corners of the specification from the perspective of a [POSITA].” *Ariad*, 598 F.3d at 1351.

The written description requirement is a question of fact but is amenable to summary judgment where no reasonable fact finder could return a verdict for the non-moving party. *PowerOasis, Inc. v. T-Mobile USA, Inc.*, 522 F.3d 1299, 1307 (Fed. Cir. 2008) (citing *Invitrogen Corp. v. Clontech Labs., Inc.*, 429 F.3d 1052, 1072–73 (Fed. Cir. 2005)); *LizardTech, Inc., v. Earth Res. Mapping, Inc.*, 424 F.3d 1336, 1346–47 (Fed. Cir. 2005); *Atl. Research Mktg. Sys., Inc. v. Troy*, 659 F.3d 1345, 1354–55 (Fed. Cir. 2011).

III. ANALYSIS

Charter moves for summary judgment that the ’362 Patent is invalid under written description and enablement as well as under §§102/103 in view of Zhang. For the reasons stated below the motion should be **DENIED**.

A. CHARTER HAS NOT SHOWN THE ’362 PATENT IS INVALID UNDER §112

Charter’s §112 argument focuses on the Court’s prior claim construction that the steps of “downconverting, by a mixer module of said wideband receiver system, a plurality of frequencies that comprises a plurality of desired television channels and a plurality of undesired television channels;” (the “Downconverting Step”); and “digitizing, by a wideband analog-to-digital

converter (ADC) module of said wideband receiver system, said plurality of frequencies comprising said plurality of desired television channels and said plurality of undesired television channels;” (the “Digitizing Step”); may be performed in any order. (Mot. at 17.) In particular, Charter argues performing the Digitizing Step before the Downconverting Step is not properly described or enabled. (*Id.*) Charter argues that the heart and focus of the ’362 Patent is performing this Downconverting Step prior to the Digitizing Step as it would save on expensive components otherwise needed for the Digitizing Step. (*Id.* at 14-16.) Charter argues the specification would need to contain disclosure of digitizing a raw incoming analog signal; digitizing signal other than I and Q signals; an ADC or digital mixers which process anything other than I and Q signals; digital mixers that downconvert undesired channels; and digitizing the entire incoming analog signal with no pre-processing for claim 11 to be valid under § 112. (*Id.* at 17-20.)

Entropic responds on two counts: first, that the ’362 Patent does sufficiently disclose performing the Downconverting Step after the Digitizing Step and second, that Charter never applies the law to its contentions that the ’362 Patent are invalid under §112. (Opp. at 13.) In particular, Entropic identifies Fig. 4 of the ’362 Patent and the accompanying description as disclosing downconversion after digitizing. (*Id.* at 14.) Entropic argues the ’362 Patent describes performing downconversion on either analog signals or their digital versions and on all channels, desired and undesired. (*Id.* at 15 (Citing the ’362 Patent at 5:31-38).) Entropic further argues that Charter fails to apply the relevant enablement or written description tests, instead applying a “gestalt” “full scope” test. (*Id.* at 16.) In particular, Entropic contends Charter provides no undue experimentation analysis and does not address whether the ’362 Patent disclosures demonstrate possession of the claimed invention as required by enablement and written description respectively. (*Id.*)

In reply, Charter contends “the claims as construed cover digitizing before any downconversion occurs and without any prior transformation into I and Q signals, but the specification describes and enables only digitization which occurs after downconversion occurs and after transformation into I and Q signals.” (Reply at 7.) Charter contends Entropic’s citation to Fig. 4’s depiction of downconverting after digitizing is a red herring as Fig. 4 also shows downconverting before digitization. (*Id.*) Charter argues that every embodiment discloses downconversion prior to digitization, whether it includes downconversion after digitization or not. (*Id.*) Charter argues Entropic failed to provide any citation describing digitizing the incoming signal before any downconverting and transformation into I/Q signals.

For the Court to grant Charter’s motion, Charter would need to show that the ’362 Patent fails to enable the full scope of its claims or that it fails to provide a written description of its invention. Charter’s motion has done neither.

Enablement asks if “one of ordinary skill in the art could not practice the[] full scope [of the claim] without undue experimentation.” *Wyeth*, 720 F.3d at 1384. This is examined by the application of the *Wands* Factors. However, Charter does not address the *Wands* Factors or undue experimentation at all. (*See*. Mot. at 18-20.) As such Charter has not shown any claims of the ’362 Patent are not enabled.

In turn, written description requires that the patent disclosure “conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.” *Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (*en banc*). Thus, the question is what is the claimed subject matter. Charter contends the claimed subject matter includes *not* downconverting prior to digitizing, Entropic contends this is an unclaimed negative limitation (Sur-Reply at 7.).

The Court agrees with Entropic. Charter's position mandates a negative limitation of no downconversion before digitization where the claimed downconversion occurs after the claimed digitization. No such negative limitation is claimed or implied by the Court's claim construction order. As such there is no requirement that the '362 Patent disclose such a negative limitation, either under written description or enablement.

Thus, the motion should be **DENIED** as to §112.

**B. CHARTER HAS NOT SHOWN THE '362 PATENT IS ANTICIPATED OR
RENDERED OBVIOUS BY ZHANG**

Charter next argues Claims 11 and 12 of the '362 Patent are invalid under §102 and/or §103. Charter argues Claim 11 is anticipated by US Patent No. 6,704,372 ("Zhang") while claim 12 is either anticipated by Zhang or rendered obvious by Zhang in view of and U.S. Patent No. 7,265,792 ("Favrat") and/or the knowledge of a POSITA. (Mot. at 21-30.) Entropic contests Zhang's disclosure of the mixer module of the Downconverting step and the Selecting Step entirely ("selecting, by digital circuitry of said wideband receiver system, said plurality of desired television channels from said digitized plurality of frequencies;") of Claim 11, and that Claim 12 is disclosed by Zhang or Charter's proposed combination.

**i. There is a Genuine Dispute of Material Fact as to Zhang's
Disclosure of the Downconverting Step**

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Central to the parties' dispute regarding the Downconverting Step is the distinction between a mixer and multiplier. Charter contends Zhang's discussion that "the multi-channel analog RF signal is multiplied by a reference signal to a lower frequency band" discloses the claimed mixer module. (*Id.* (citing Zhang at 3:34-36).) Charter argues "[a] POSITA would consider a component that multiplies two signals together to be a 'mixer.'" (*Id.*)

In response, Entropic argues Charter has identified no disclosure of a “mixer module” in Zhang, either express or inherent. First, Entropic argues this disclosure of multipliers is not a disclosure of a mixer. (Opp. at 21.) Entropic points to its expert’s discussion that such multiplication can be performed by components other than mixers. (*Id.*) Second, Entropic argues that Charter’s expert admitted the use of mixers is not inherent to Zhang. (*Id.*) Entropic argues that without expressly disclosing a mixer or arguing inherency, Charter cannot meet its burden. (*Id.*)

Charter replies that even the ’362 Patent equates multipliers with mixing. (Reply at 8 (citing the ’362 Patent at 3:35-37).) Charter explains this supports its position that a POSITA would consider a “multiplier” is synonymous with a “mixer,” noting it need not show Zhang discloses a mixer *in haec verba*. (*Id.* at 8-9.)

Entropic’s arguments regarding inherency miss the mark. What a POSITA understands from a particular disclosure or what meaning certain terms would have in a given context are not necessarily the realm of inherency. As such Charter’s argument that a “multiplier” in this context would be understood to meet the “mixer module” limitation, is not an inherency argument. Rather, Charter argues Zhang expressly discloses a “mixer module,” Zhang merely uses the term “multiplied” instead.

However, Entropic contests the understanding of a POSITA with citation to its own expert’s understanding. (*See* Opp. at 21.) This creates a genuine dispute of material fact as to Zhang’s disclosure of a mixer.

ii. There is a Genuine Dispute of Material Fact as to Zhang’s Disclosure of the Selecting Step

Regarding the Selecting Step, Entropic contests Charter’s showing that Zhang discloses selecting desired channels from the claimed “a plurality of desired television channels and a plurality of undesired television channels.”

Here, Charter identifies Zhang’s disclosure of a “digital selector [that] receives the demultiplexed digital RF channels []and then selects one or more of the RF Channels []from the one or mor of the digital RF channels.” (Mot. at 26.) Charter argues that Zhang’s disclosed demultiplexer and digital selector would be capable of handling the “10 channel[] example of ‘wideband’” found in the ’362 Patent. (*Id.* at 26-27.)

Entropic argues that the “plurality of frequencies” of Zhang is deficient as it does not contain the claimed “plurality of undesired television channels.” (Opp. at 22.) Rather, Entropic argues Zhang discloses the “RF channels contain content channels that are selected or used by a subscriber.” (*Id.* (citing Zhang at 4:2-4.) Entropic argues that because the digital selector of Zhang only selects from the channels the user has selected or subscribed to, Zhang does not disclose selecting from all desired and undesired television channels¹. (*Id.*)

Charter replies that it is unclear what Entropic believes constitutes the claimed “plurality of frequencies” but notes that as the ’362 Patent discloses an embodiment using just 10 channels, it would be improper to require Zhang to show more. (Reply at 9 (Citing *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1583 (Fed. Cir. 1996)).)

The Court finds there is a genuine dispute of material fact as to the selecting step. Entropic has presented evidence that Zhang does not disclose selecting from both desired and undesired channels. (*See* Opp. at 22.) Charter does not dispute Zhang discloses “content channels that are selected or used by a subscriber” or present any argument that it cannot be understood to disclose

¹ Entropic also argues the architecture disclosed by Zhang would be unable to “digitize and select from the entire spectrum” and that the “10 channels” of Zhang do not constitute the claimed “plurality of signals composed of all the desired and undesired channels.” (*Id.* at 23.) However, Entropic seems to drop this argument in its Sur-Reply, clarifying it argues Zhang fails to show “processing of both desired and undesired channels.” (Sur-Reply at 9.)

only desired channels. When viewing this evidence in the light most favorable to the nonmovant, the motion should be **DENIED** as to claim 11.

iii. There is a Genuine Dispute of Material Fact as to Claim 12

Charter argues two points for claim 12. First, it argues that the uncontested disclosure of outputting said digital datastream in Zhang, the final element of Claim 11, is a disclosure of a small genus that includes only a small number of species, namely via serial or parallel interface. (Mot. at 29.) Charter argues the disclosure of this small genus in Zhang anticipates the further limitation of claim 12. (*Id.*) Second, Charter argues serial interfaces were conventional and well known, citing both the '362 Patent and its expert's discussion of Favrat. (*Id.*) Charter contends that a serial interface being conventional and well known and only one of a small set of options would make it one of a finite number of identified predictable solutions, rendering claim 12 obvious. (*Id.* at 29-30.)

Entropic contends that because Charter admits Zhang does not disclose claim 12 and Charter's genus/species discussion is mere attorney argument, Charter has not shown claim 12 is anticipated. (*Id.*) Entropic further contests Charter's reliance on Favrat. (*Id.* at 24-25.) Entropic argues Favrat discloses outputting with an analog signal not a digital one, and thus it does not demonstrate a serial interface was conventional with regards to outputting a digital datastream. (*Id.*)

The Court finds there is a genuine dispute of material fact. First, both of Charter's arguments rely on its genus/species argument. However, it was presented as mere attorney argument without evidentiary support. The Court cannot rely on attorney argument, particularly where, as here, the ultimate burden of proof is on the movant. Second, Charter's argument that a

serial interface is conventional is genuinely contested. (*See Opp.* at 24-25.) Thus, the motion should be **DENIED** as to claim 12, as well.

IV. CONCLUSION

Having considered all of the facts, the Court recommends that Charter's motion be **DENIED**.

A party's failure to file written objections to the findings, conclusions and recommendations contained in this report **by not later than December 7, 2023**, bars that party from *de novo* review by the District Judge of those findings, conclusions, and recommendations and, except on grounds of plain error, from appellate review of unobjected-to factual findings and legal conclusions accepted and adopted by the district court. FED. R. CIV. P. 72(b)(2); *see also Douglass v. United Servs. Auto. Ass'n*, 79 F.3d 1415, 1428–29 (5th Cir. 1996) (*en banc*). Any objection to this Report and Recommendation must be filed in ECF under the event "Objection to Report and Recommendation [cv, respoth]" or it may not be considered by the District Judge.

SIGNED this 1st day of December, 2023.


ROY S. PAYNE
UNITED STATES MAGISTRATE JUDGE